Book-to-Market, Size and Momentum Factors in Market-Timing Models: The Case of the Polish Emerging Market

Joanna Olbrys
Bialystok University of Technology, Faculty of Computer Science
Wiejska 45A, 15-351 Bialystok, Poland
Phone: +48857469052, e-mail: j.olbrys@pb.edu.pl

Abstract

The main goal of this paper is to present modified multifactor extensions of classical market-timing models, with Fama and French’s spread variables SMB and HML, and Carhart’s momentum factor WML, on the Polish emerging market¹. The empirical results on the Warsaw Stock Exchange (WSE) show a pronounced Fisher’s effect in the case of the main WSE indexes. For this reason, we include lagged values of the market factor as an additional independent variable in the regressions of market-timing models. The market-timing and selectivity abilities of fund managers are evaluated for the period January 2003 to December 2010. We test a group of selected Polish equity open-end mutual funds. We compare the seemingly unrelated regression (SUR) and the Newey-West method (HAC) results of the models and investigate their statistical properties.

JEL classification codes: C1, C33, G1, G2
Keywords: mutual funds, market-timing, size, book-to-market, momentum, nonsynchronous trading, SUR method

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¹ SMB stands for “small (market capitalisation) minus big”, HML for “high (book-to-market ratio) minus low” and WML for “winners minus losers”